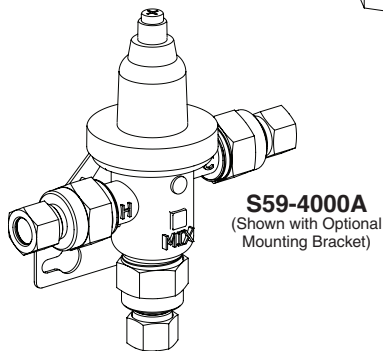
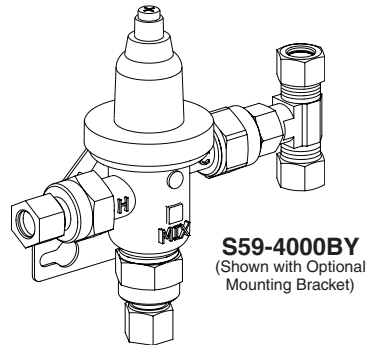
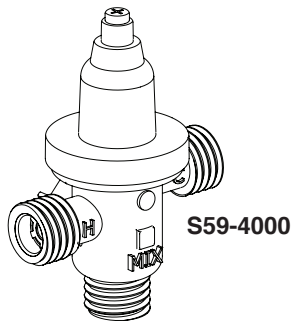


# Installation

## S59-4000 S59-4000A S59-4000BY

### Navigator® Thermostatic Mixing Valve for Sinks/Faucets



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Inlet Connections: 1/2" NPT or 3/8" Compression  
Outlet Connection: 1/2" NPT or 3/8" Compression  
Temperature Range: 95–120°F  
Maximum Pressure: 125 PSIG  
Inlet Temperature, Hot: 120–180°F  
Inlet Temperature, Cold: 33–80°F  
Minimum Temperature Differential  
(from valve set point): 10°F



**Read the instructions in this manual before beginning installation. Save these instructions and refer to them for inspection, maintenance and troubleshooting information.**

For questions regarding the operation, installation or maintenance of this product, visit [bradleycorp.com](http://bradleycorp.com) or call 800.BRADLEY (800.272.3539).

Product warranties and parts information may also be found under "Resources" on our website at [bradleycorp.com](http://bradleycorp.com).



## Safety Information

### To ensure proper operation:

#### Installation

Failure to comply with proper installation and maintenance instructions could contribute to a valve failure resulting in severe bodily injury including scalding, chilling, and/or death depending upon system water pressure changes and/or supply water temperature changes.

Use this thermostatic mixing valve in accordance with ASSE standard 1070.

When installed in accordance with ASSE standard 1070, the valve is designed to be installed at fixtures such as sinks, bidets, lavatories, and bathtubs. When installed as an ASSE 1070 valve, the valve does not function as an ASSE 1016, ASSE 1017, or ASSE 1069 valve.

This valve should not be used where ASSE 1016 devices are required.

This valve does not provide protection from pipe freezing.

Installation of this system must be completed by a qualified plumber in compliance with all national and local codes. Compliance and conformity to local codes and ordinances is the responsibility of the installer. Should these codes differ from the information in the manual, follow the local codes. Inquire with governing authorities for additional local requirements.

#### Inspection

Regular checking and cleaning of the valve's internal components and check valves is necessary for maximum life and proper product function. Periodic inspection and yearly maintenance by a licensed contractor is required. Corrosive water conditions and/or unauthorized adjustments or repairs could render the valve ineffective for its intended service. Frequency of cleaning and inspection depends upon local water conditions.

Output temperature of each valve section must be individually checked and adjusted at initial installation and on a quarterly basis.

#### Water Temperature

Final temperature adjustment is the responsibility of the installer.

### Supplies Required

- Shut-off on the outlet if tempered water is supplied to a remote location
- Shut-off on the inlets/supplies
- (2) #10 fasteners (and wall anchors, if necessary) for wall bracket

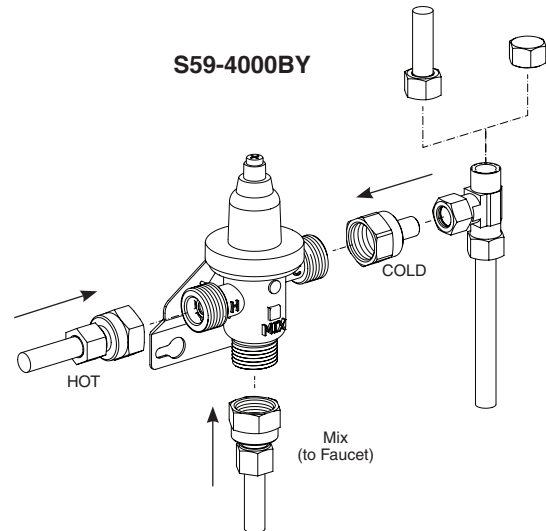
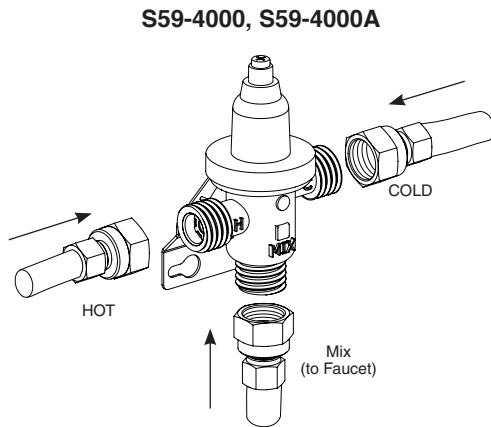
### Tools Required

- Adjustable Wrench
- Needle Nose Pliers
- Phillips-Head Screwdriver

## 1 Connect Supply Lines



Use only teflon tape or sealant appropriate for plastic threads. Do not use pipe dope or thread lock.



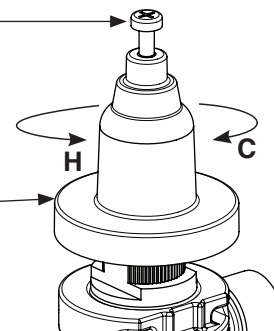
## 2 Adjust Temperature with Water Running



This valve is NOT factory preset. Upon installation, the temperature of this valve must be checked and adjusted to ensure delivery of a safe water temperature. Water in excess of 110°F (43°C) may cause scalding.

**A** Loosen Cap Screw about 1/4" (4-6 turns) and lift up cover (do not remove).

**B** Using cover, turn cartridge gently until desired water temperature is reached. Do not turn past stops as this may damage unit. Push cover down and tighten screw.



## 3 Test Unit



**DO NOT SKIP THIS STEP!!!**

Shut the hot water inlet off by closing hot water inlet valve. While the hot water supply is turned off, check to make sure the cold water flow is reduced. If the cold water is reduced properly, reopen the hot water supply.

Shut the cold water inlet off by closing the cold water inlet valve. While the cold water supply is off, check to make sure that the hot water flow has shut down.

### Troubleshooting: Thermostatic Mixing Valve



Before attempting to troubleshoot the valve or disassemble the components, check for the following conditions:

- If stop valves are used, make sure that they are fully open.
- Make sure that the hot and cold inlet pipes are connected properly, and that there are no cross-connections or leaking stop valves.
- Check the hot water heater output to make sure that it is at least 10°F above the set temperature.



Be sure to close the appropriate shut-off valves prior to disassembly of the valve and reopen the valves after inspection and repair is complete.

Problem	Cause	Solution
External leaks.	Damaged cartridge or O-rings.	Replace cartridge with part number 269-1927
Improper water temperature or temperature fluctuation.	Hot water supply is not 10° above desired set point.	Increase hot water supply temperature
	Valve temperature is not properly set.	Adjust the temperature as shown on page 3 step 2.
Limited water flow.	Dirt and debris have built up in the valve or strainer.	1. Check to make sure both hot and cold supplies are connected to the Navigator mixing valve and that they have water flow.  2. Remove cover and U-clip. Remove the cartridge and clean the strainer. It is not required to grease cartridge, however if desired, use silicone grease only. Do not use grease on check valves.

### Parts List

Item	Part No.	Description	Quantity		
			S59-4000	S59-4000A	S59-4000BY
1	160-463	Cap Screw	1	1	1
2	107-582	Cover	1	1	1
3	269-1927	Thermostatic Cartridge	1	1	1
4	198-014	Check Valve*	2	2	2
5	132-051	Retaining Ring*	2	2	2
6	269-1999	3/8" Compression Adapter	-	3	2
7	146-079	U-Clip	1	1	1
8	118-319	Valve Body	1	1	1
9	S45-2456	Mounting Bracket Kit (optional)	1	1	1
10	153-461	1/2" NPT x 3/8" OD Compression Adapter	-	-	1
11	269-2012	3/8" OD Compression Tee	-	-	1
12	136-050	3/8" OD Compression Cap	-	-	1

\* Included with Prepack S65-326

